

# CITY OF FLAGSTAFF

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## Municipal Greenhouse Gas Emissions Report Fiscal Year 2014

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Flagstaff Sustainability  
Program



# Introduction

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## Why We Track:

The City of Flagstaff is committed to making Flagstaff more resourceful and resilient. And one important component of resilience in Flagstaff is contribution toward climate change solutions. Therefore, the City of Flagstaff is committed to reducing our greenhouse gas emissions by 15% from FY 2009 levels. To make this happen, we are carefully monitoring City-wide energy and water consumption, and switching over as much energy as possible to clean renewables like solar power. Tracking these efforts not only contribute to protecting our climate, it also saves taxpayer dollars. The less money we have to spend on electric and gas consumption, the more we have to provide excellent service for Flagstaff residents.

## What We Track:

Here is the list of the data that we are carefully monitoring:

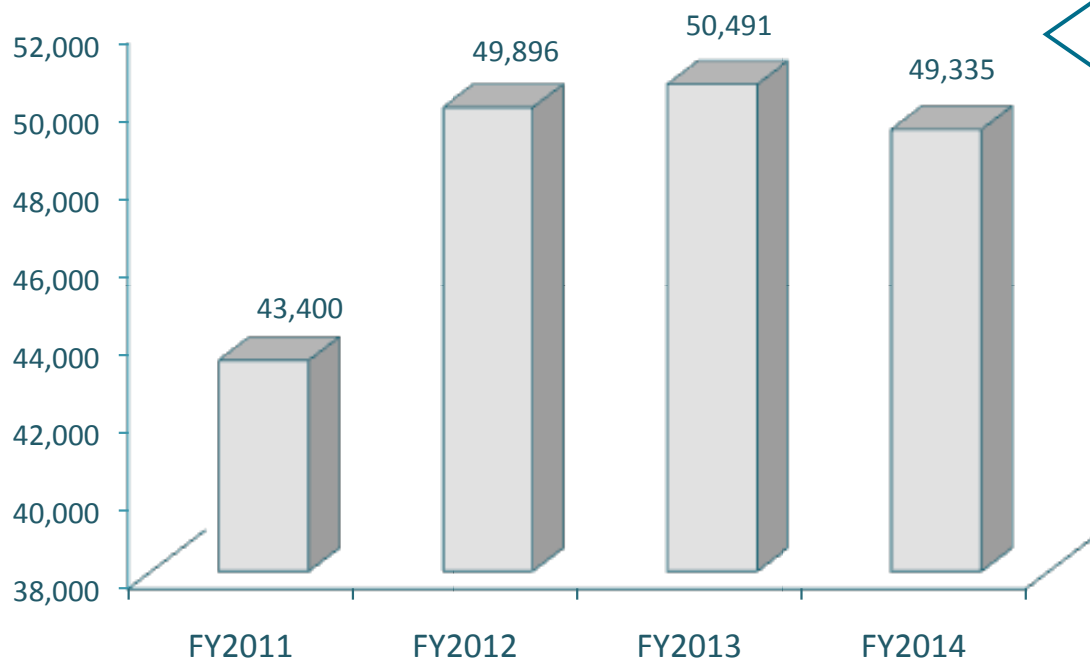
- Electricity consumption at all City facilities
- Natural Gas consumption at all City facilities
- Fuel consumed by employee commute
- Fuel consumed in diesel generators
- Fuel consumed by flights in and out of Flagstaff (within city limits)
- Fuel consumed by our fleet
- Operation hours of our biogas cogeneration plant
- Municipal waste production
- kWh of Solar Energy Production

## Our Next Steps:

The City of Flagstaff is helping employees be more resourceful by assisting in sustainable office behaviors, like power strip utilization, double sided printing, power saver computer settings, and sensor light installation. Sustainable behavior change is critical for success. To facilitate this, we are continuously upgrading our facilities for energy efficiency. This includes upgrading to energy efficient appliances, changing out inefficient light bulbs, and providing opportunities for employees to recycle items like glass bottles and batteries at City Hall.

# Municipal Emissions Summary

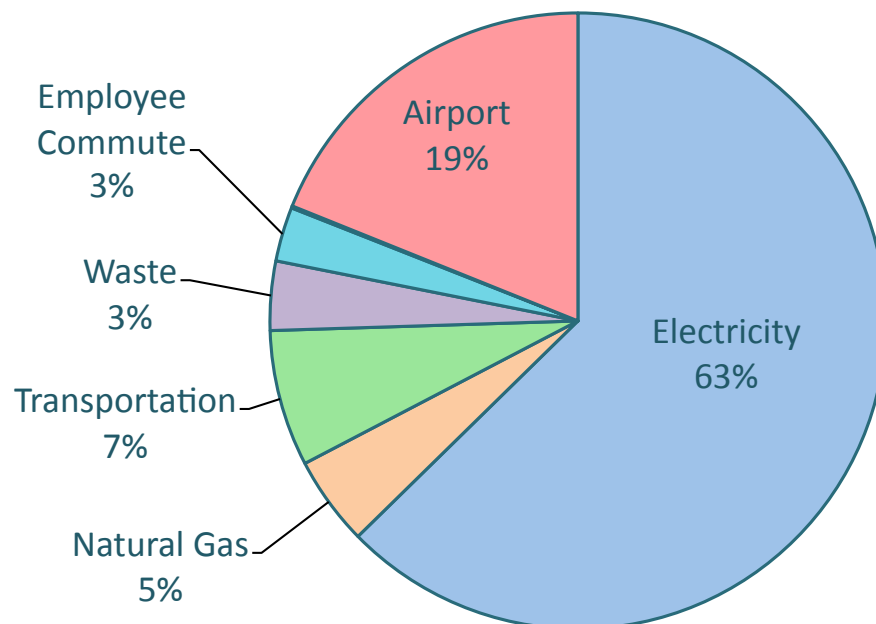
## Total Metric Tons of CO<sub>2</sub>e\*



Municipal  
GHG  
emissions  
dropped by  
2%

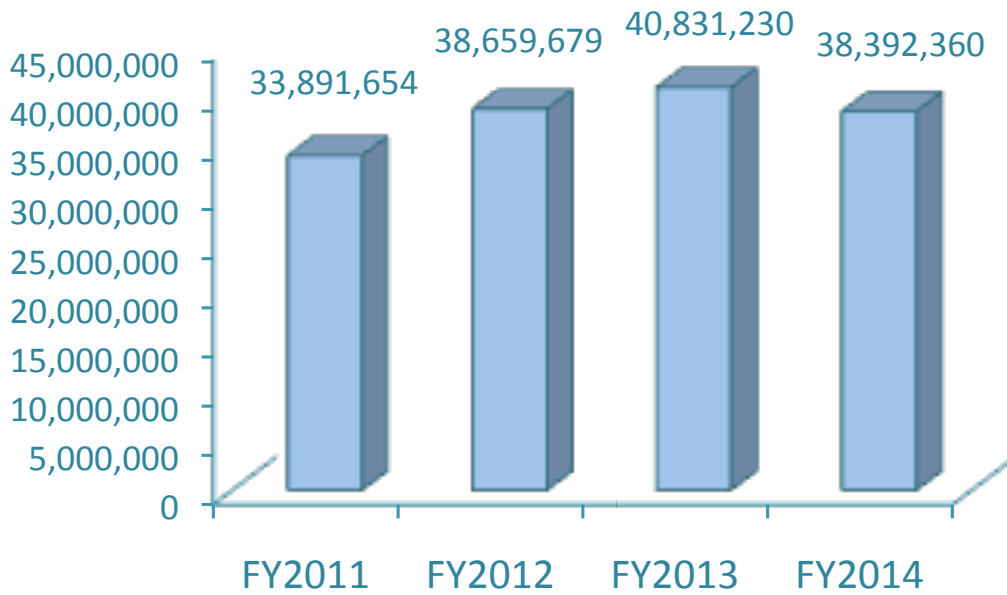
\*CO<sub>2</sub>e means “carbon dioxide equivalents,” and is the translation of all types of greenhouse gases into the amount of carbon dioxide which would create the same amount of climate change potential.

## FY14 Emissions by Source



# Electricity Consumption

## Total Kilowatt Hours Consumed

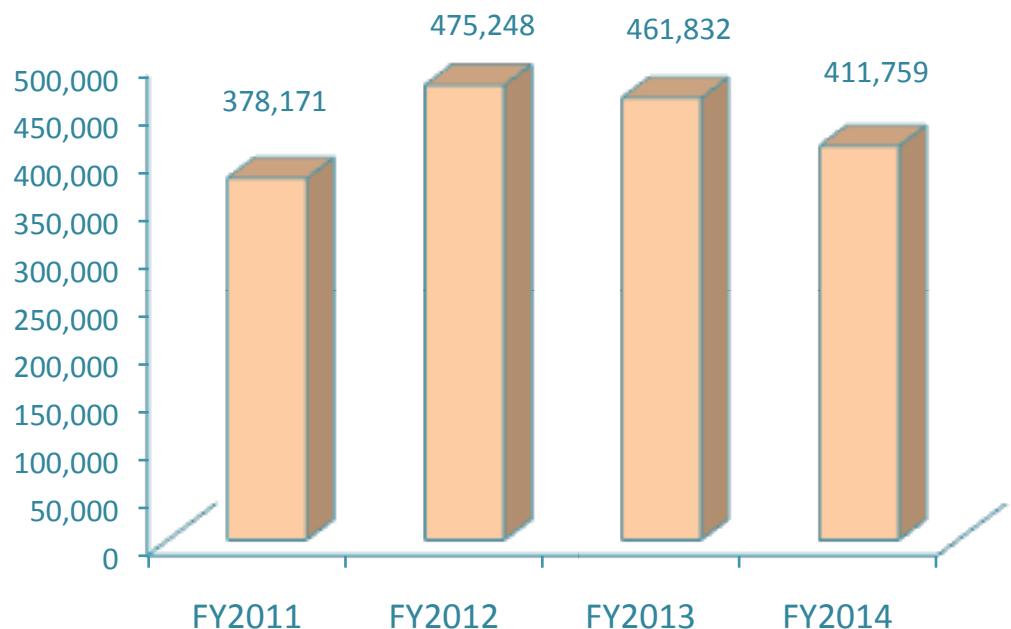


Municipal electricity consumption dropped by nearly 2.5 million kwh

# Natural Gas Consumption

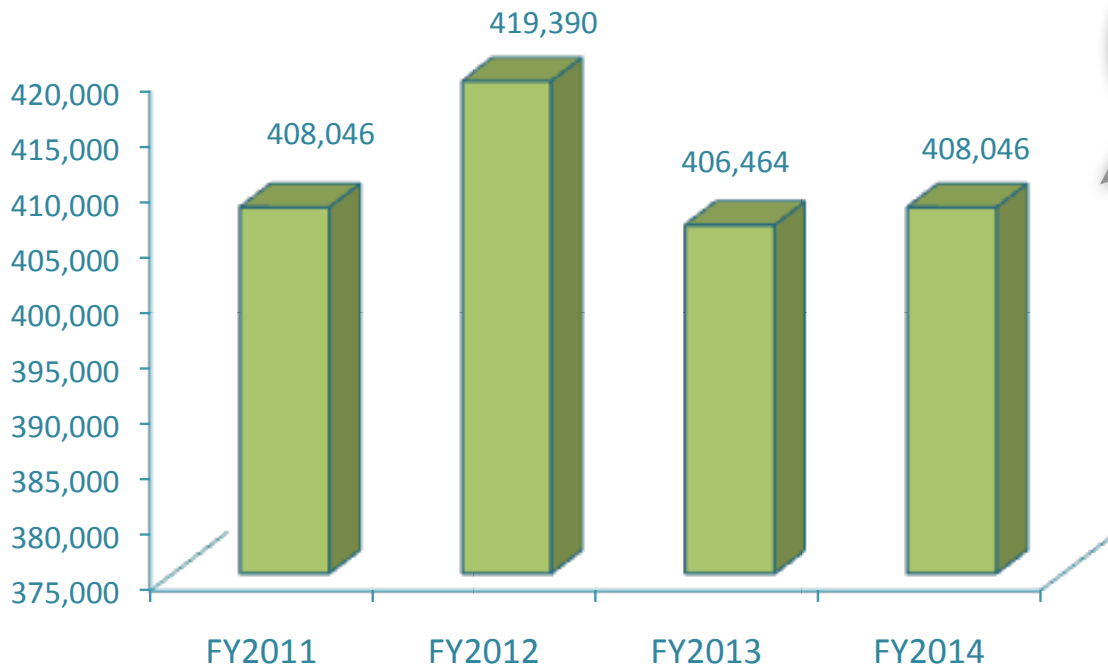
## Total Therms Consumed

Municipal natural gas consumption dropped by nearly 11%



# Transportation

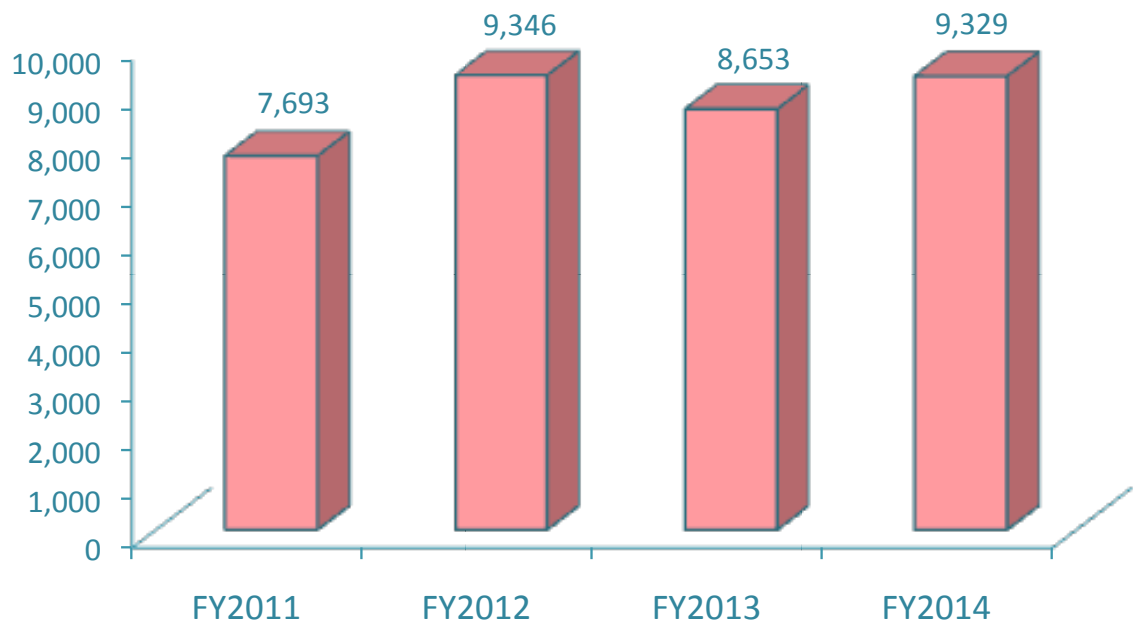
## Gallons of Fuel Consumed



# Airport

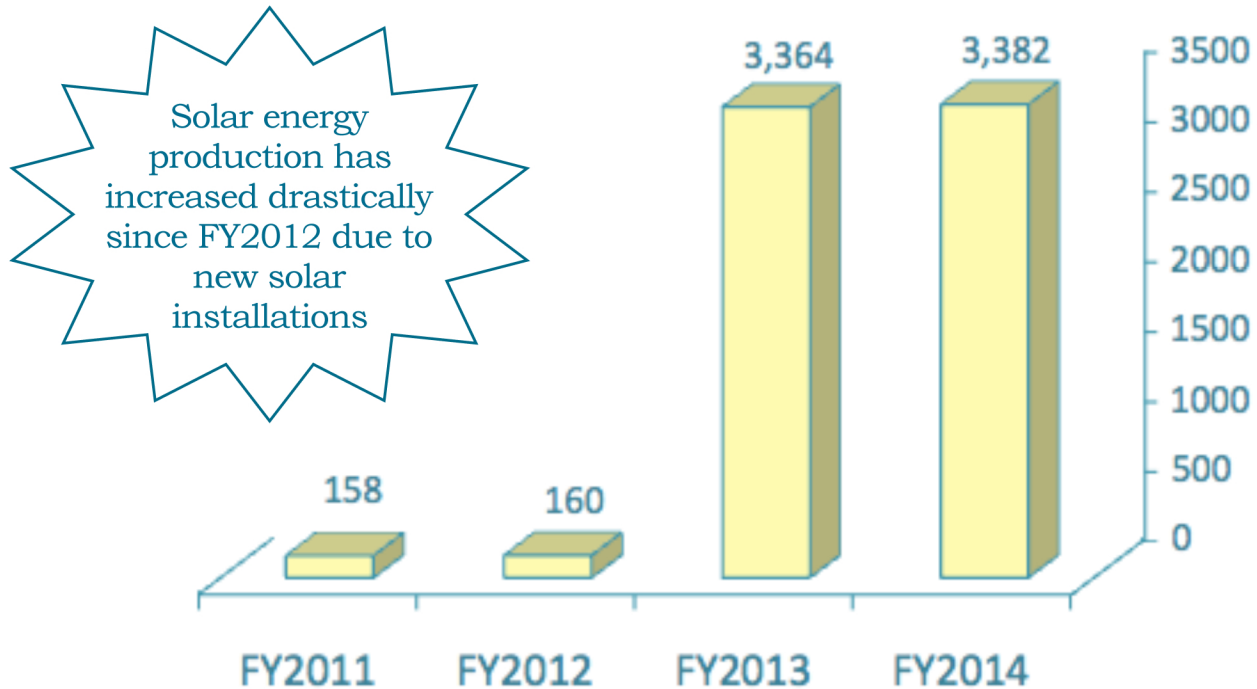
## Metric Tons of CO2e Produced

Metric tons of CO2e produced by the airport rose by about 8%.



# Solar Power Generated

## Megawatt Hours of Energy Produced



## Other Data

Data	FY12	FY13	FY14	Comments
Tons of waste sent to landfill	1,534 Tons	1,311 Tons	1,694 Tons	Municipal waste has increased by approximately 30% over the last fiscal year.
Hours the Cogeneration Plant Operated	1,198 Mwh	302 Mwh	608 Mwh	The cogeneration unit has been experiencing mechanical challenges since FY13.
Renewable Energy Generated	2,649 Mwh	2,407 Mwh	2,891 Mwh	Renewable energy has largely been increasing each year.